

Amended Claims

The independent claims have each been amended to more particularly point out and distinctly claim what Applicants regard as their invention. Specifically, claims 42, 68, 70, 72 and 74 have each been amended, without change in the substantive scope thereof, to clarify that the ten or more different materials are formed at predefined discrete regions.

No new matter has been added.

Interview

Applicants thank the Examiner for the courtesy of a telephonic interview on October 5, 2000, during which the prior art of record relied upon in the previous Office action was discussed in light of Applicants previously-filed Amendment B.

Rejections under 35 U.S.C. §102(b) / §103(a) – Chern et al.

As noted in the previously-filed response (Amendment B), the Office action rejects each of the then-pending independent claims 42, 68, 70 and 72, together with certain claims dependent therefrom (claims 2, 4-5, 8, 10, 11, 15-24, 26, 29, 42-44, 46-57, 60, 64, 66, 69, 71 and 73) as being anticipated under 35 U.S.C. §102(b) by U.S. Patent No. 4,545,646 to Chern *et al.*¹ (See, generally, paragraph 31 at pages 15-17 of the Office action). The Office action rejects each of the aforementioned claims, in the alternative, under 35 U.S.C. §103(a) as being obvious over Chern *et al.*

Among other aspects, Chern *et al.* is said to teach methods for forming a continuous layer of material on a substrate, where the layer comprises a material having continuous, contiguous stepped gradations in refractive index in a predetermined periodic pattern. The Office action recites from Chern *et al.*, as follows:

“This variation in thickness may be a in a continuous manner or in a stepped manner, as determined by the scanning pattern of the laser beam. The resulting structure has a continuously graded index layer as a function of thickness... .”

¹ Applicants acknowledge that claims 30-36, 45, 65 and 67 are not rejected based on Chern *et al.*

(See paragraph 31, page 15 of the Office action; italicized emphasis in Office action; underlined emphasis added).

Applicants respectively traverse this basis for rejection for the reasons set forth in the previously-filed Amendment B, together with the following reasons.

Chern *et al.* do not disclose forming an array comprising ten or more different materials on ten or more discrete predefined regions of a substrate, as required by each of the independent claims. Rather, Chern *et al.* disclose a continuous layer of material that comprises variations in composition. The compositional variations are said to be effected either by *continuous variations* in thickness of a component, or alternatively, by *stepped variations* in thickness. Hence, although Chern *et al.* disclose that the variation in thickness can be in a stepped manner, the reference does not teach applying such variations to locationally discrete regions of the substrate. Rather, materials with stepped-variations in thickness would have been immediately adjacent and contiguous to each other. Stated analogously, Chern *et al.* teach that at least one or more layer is continuous across the substrate – not formed at discrete (*i.e.*, discontinuous) regions of the substrate.

As such, the Chern *et al.* reference does not anticipate the invention defined by the presently-pending claims.

Amendment B

Applicants respectfully request that the amendments and arguments presented in Amendment B be further considered in combination with this Supplemental Amendment C.

Equivalents

The amendments to the claims and the arguments presented in this supplemental response to the Office action have been made to more particularly point out and distinctly claim the subject matter which the Applicants regard as their invention. By such amendments, the Applicants in no way intend to surrender any range of equivalents beyond that which is needed to patentably distinguish the claimed invention as a whole over the prior art.

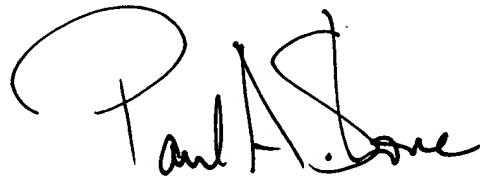
Applicants expressly reserve patent coverage to all such equivalents that may fall in the range between applicants literal claim recitations and those combinations that would have been obvious in view of the prior art.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Applicants believe that no further fees are required. The Examiner is, however, authorized to charge any necessary fees due in connection with this application, and/or to credit any overpayment of fees to Deposit Account No. 50-0496.

Respectfully submitted,



Date Submitted: 10.5.00

Paul A. Stone
Reg. No. 38,628

Symyx Technologies, Inc.
3100 Central Expressway
Santa Clara, CA 95051
(408) 764-2016